

PEER REVIEW HISTORY

BMJ Open publishes all reviews undertaken for accepted manuscripts. Reviewers are asked to complete a checklist review form (<http://bmjopen.bmj.com/site/about/resources/checklist.pdf>) and are provided with free text boxes to elaborate on their assessment. These free text comments are reproduced below.

ARTICLE DETAILS

TITLE (PROVISIONAL)	Accelerated Enhanced <i>Recovery</i> following <i>Minimally Invasive</i> Colorectal Cancer Surgery (<i>RecoverMI</i>): a Study Protocol for a Novel, Randomized Controlled Trial
AUTHORS	Price, Brandee; Bednarski, Brian; You, Y. Nancy; Manandhar, Meryna; Dean, E.; Alawadi, Zeinab; Speer, B.; Gottumukkala, Vijaya; Weldon, Marla; Massey, Robert; Wang, Xuemei; Qiao, Wei; Chang, George

VERSION 1 - REVIEW

REVIEWER	Slim, Karem University Hospital Estaing Clermont-Fd, France speaker for Sanofi, MSD, Convatec and fresenius Otherwise none, in relation with this paper to declare
REVIEW RETURNED	17-Jan-2017

GENERAL COMMENTS	Good protocol. But it should be better if the authors include an economical analysis
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REVIEWER	Antonio Biondi University of Catania, Italy
REVIEW RETURNED	21-Feb-2017

GENERAL COMMENTS	<p>This is an interesting paper that reports the first version of a protocol for a randomized study on the feasibility of short-stay minimally invasive colorectal cancer surgery. In general, the manuscript is well written and it concerns a very promising topic in surgery. The study has a lot of strength points as listed in the manuscript, but it also has an important limitation, as neither patients nor providers are blinded. The Introduction is clear and complete; the Methods section is well structured; Table 1 reported inclusion and exclusion criteria in a clear way; the statistical analysis section is well described. If possible, I would suggest to modify Figure 1 as it does not seem so clear; maybe a larger image could be more easy to understand for the reader.</p> <p>Analysis of Literature in the text is accurate; anyway I would include more references in the text on the comparison between laparoscopic and open surgery for colon cancer 1) Biondi A et al: Predictors of conversion in laparoscopic-assisted colectomy for colorectal cancer and clinical outcomes. Surg Laparosc Endosc Percutan Tech. 2014; 2) Biondi A et al, Laparoscopic vs. open approach for colorectal cancer: evolution over time of minimal invasive surgery. BMC Surg. 2013.</p>
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REVIEWER	Corrado Pedrazzani University of Verona, Italy
REVIEW RETURNED	11-Apr-2017

GENERAL COMMENTS	<p>Dr. Brandee and colleagues proposed to test the effectiveness of a trimodality approach (MSI plus ERAS plus Tele Recovery) in reducing the total length of hospital stay after colon resection for cancer. The design of the study is innovative and interesting although the applicability and reproducibility of this protocol seems difficult in actual clinical practice.</p> <p>The authors should better explain what Tele Recovery represents in this experience and why Tele Recovery should be of help in achieving better results. Does it give great advantages compared to a call phone?</p> <p>The authors should better explain where the patients will stay after discharge from hospital (i.e. home, hospital facility, etc.) and if inclusion criteria consider the distance of the place where they stay from hospital, presence of other adults, etc.</p> <p>Are all cancer stages included? Are patients with advanced cancer or palliative surgery included?</p> <p>Lastly, do the authors consider the title of the paper entirely indicative of the main purpose of the study?</p>
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VERSION 1 – AUTHOR RESPONSE

Reviewer 1 (Dr. Slim):

Thank you for your careful review of our manuscript.

1. Comment: It should be better if the authors include an economical analysis.

Response: We agree that would be an interesting component to add to the study; however, it is outside the scope of the current study to examine the feasibility of next-day discharge with TeleRecovery. We hope to include economic analyses in future studies.

Reviewer 2 (Dr. Antonio Biondi):

Thank you for your thoughtful review of our manuscript and your kind comments. We made the following changes in response to your comments:

1. Comment: Modify Figure 1 as it does not seem so clear; maybe a larger image could be more easy to understand for the reader.

Response: We increased the size of Figure 1.

2. Comment: Include more references in the text on the comparison between laparoscopic and open surgery for colon cancer 1) Biondi A et al: Predictors of conversion in laparoscopic-assisted colectomy for colorectal cancer and clinical outcomes. Surg Laparosc Endosc Percutan Tech. 2014; 2) Biondi A et al, Laparoscopic vs. open approach for colorectal cancer: evolution over time of minimal invasive surgery. BMC Surg. 2013.

Response: Thank you for your suggestions. We have updated the manuscript to include those references.

Reviewer 3 (Dr. Corrado Pedrazzini):

We appreciate your careful consideration of our manuscript.

1. Comment: The design of the study is innovative and interesting although the applicability and

reproducibility of this protocol seems difficult in actual clinical practice.

Response: We have designed the protocol to be easily implemented; however, we agree that in actual clinical practice, the need for health professionals to perform the TeleRecovery evaluation and respond to instant message communication can be seen as a challenge. For this reason we are examining the feasibility in a high volume unit. Although other units may not be able to implement RecoverMI exactly, it can serve as a blueprint to make significant reductions in length of stay and improve quality of life. If this study demonstrates feasibility, we plan to proceed to multi-institutional evaluation.

2. Comment: The authors should better explain what Tele Recovery represents in this experience and why TeleRecovery should be of help in achieving better results. Does it give great advantages compared to a call phone?

Response: Great comment. We are using iPads for this study and have edited the manuscript to reflect that. We do not consider iPads superior to smartphones for this study. We do, however, feel that videoconferencing is better than a phone call since it allows examination of the patients and their surgical sites. TeleRecovery also permits non-urgent text-messaging communication on a dedicated platform, which can help to resolve non-urgent concerns. Future studies may examine TeleRecovery feasibility on the patients' devices. This is described in the manuscript.

3. Comment: The authors should better explain where the patients will stay after discharge from hospital (i.e. home, hospital facility, etc.) and if inclusion criteria consider the distance of the place where they stay from hospital, presence of other adults, etc.

Response: Independent of RecoverMI, our surgical team strongly recommends that any patient traveling more than 100 miles for treatment stay within the immediate surrounding area for at least 7-10 days post-operatively. Since this is already a requirement for care, it was not included in the eligibility criteria for the study. Patients may stay in their home, hotel, etc. after discharge as long as it is in the nearby surrounding area. We have clarified this in the manuscript.

4. Comment: Are all cancer stages included? Are patients with advanced cancer or palliative surgery included?

Response: All cancer stages are included for generalizability. However, for this pilot study, many of the patients with advanced disease (stage IV) received preoperative systemic therapy, and were not included. However, if the pilot demonstrates feasibility of the approach, the protocol may be expanded to allow patients who have received preoperative systemic therapy.

5. Comment: Lastly, do the authors consider the title of the paper entirely indicative of the main purpose of the study?

Response: We have edited our title to the following: "Accelerated Enhanced Recovery following Minimally Invasive Colorectal Cancer Surgery (RecoverMI): a Study Protocol for a Novel, Randomized Controlled Trial"

VERSION 2 – REVIEW

REVIEWER	Slim, Karem Department of Digestive Surgery and Ambulatory Unit, University Hospital Clermont-Ferrand France
REVIEW RETURNED	27-Apr-2017

GENERAL COMMENTS	I think the economic aspects should be evaluated in the analysis
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REVIEWER	Antonio Biondi University of Catania, Italy
REVIEW RETURNED	11-May-2017

GENERAL COMMENTS	The paper is well written; all the comments have been satisfactorily
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	addressed
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REVIEWER	Corrado Pedrazzani University of Verona, Italy
REVIEW RETURNED	27-Apr-2017

GENERAL COMMENTS	I would like to compliment with the authors for the highly interesting design of the study
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VERSION 2 – AUTHOR RESPONSE

Reviewer #1:

Comment: I think the economic aspects should be evaluated in the analysis.

Response: We agree that an economic analysis would be of value and we will plan to do that post-hoc. However it was not initially written into the protocol, which has already begun accrual. We have added a statement to the discussion.